Programme syllabus

Master's Programme, Project Management and Operational Development, 60 credits
Magisterprogram, projektledning och verksamhetsutveckling
60.0 credits

Valid for students admitted to the education from autumn 07 (HT - Autumn term; VT - Spring term).

This is a translation of the Swedish, legally binding, programme syllabus.

Programme objectives

Today most of the development work and implementation of new technologies are performed as projects. At the same time there is a great lack of project managers on all levels as well as a lack of understanding of the most efficient way of realizing a project. This in spite of the fact that there are several standards and developed methodologies for assuring the quality and success of project realization.

Knowledge and understanding

After finishing the master’s programme, the participant should have knowledge and understanding within the area of quality assurance of project planning and execution. This includes the knowledge of project management according to ANSI 99 – 001 – 2000[1] and ISO 10006 both of which are standards for quality assurance. Furthermore the participant will have profound knowledge in the impact of randomness and risks in project management and operational development and being able to utilize the monte carlo techniques to solve decision problems. Also, the importance of team development, according to FIRO-model[2], and is taught in one of the study courses to complement the understanding of what makes a management system serve its purpose. Furthermore, the roles of the stakeholders in a project will be understood. This defines the roles of the sponsor, project manager and the project team.


Skills and abilities

After the programme, the student should be able to:

- Function as a project manager, even in large projects
- Develop the project management team
- Use the tools necessary for planning and executing projects
• Design stochastic models for simulating risks processes and project execution
• Take the responsibility as a sponsor for more than one project by having proven tools for follow-ups and a management system that really works
• Develop and implement the management system that serves its purpose

Ability to make judgements and adopt a standpoint

By having the set of rules standardised by the ISO and ANSI standards the participant will have clear criteria for making a standpoint in the planning and execution of any project. The criteria will also make it easier for the future project manager to make judgements of the proper planning and evaluation of project management work. The tools for follow ups which are taught will enable the participant to supervise more than one project and make proper judgements for further execution.

Extent and content of the programme

The nominal time of the program is 1 year and 60 ECTS. The study courses within the programme are divided into modules enabling the students to take the program on part time basis and thus total time 2 years still yielding, in total 60 ECTS. Three of the courses are on the second level and the other three courses are on the first level; however, these are not introductory courses. The thesis will be graded according to advanced level. The language in all portions of the programme is English.

Eligibility and selection

To be eligible for the programme, the participant must have completed a 3 year (180 ECTS) academic exam at a recognised university. In addition, the participant needs documented experience in all three areas of: mathematical statistics (practical work or study courses), experience of quality systems (or education) and experience from practical work or having attended a study course in management. Specific admission requirementsThe specific requirements may be assessed as not fulfilled if

1. the degree awarding institution is not considered to meet acceptable quality standards by the authorities of the country in which the institution is located
2. the degree does not qualify for admission to equivalent Master level in the country where the degree is awarded

Selection Admission to the program is based on the following criteria (in order of priority): Assessment of university/higher education institute; grades in degree; grades in courses; work experience relevant to the program

Implementation of the education

Structure of the education

Structure of the education Each of the six study courses comprise 7.5 higher education credits. The two tracks of the education are executed in parallel. The 3 study courses covering the area of project management are given sequentially and in parallel with those the study courses aiming at development tools are given. Please see appendix 1. The two tracks of the programme could be studied independently and it is irrelevant which is taken first. During late August – October Project Planning (7.5 higher
education credits) parallel with Practical Statistics (7.5 higher education credits), in late October – December Project Control (7.5 higher education credits) in parallel with Organisation and Management system (7.5 higher education credits) and in January – March are given Project Analysis (7.5 ECTS) and Leadership for operational Development (7.5 higher education credits). In the rest of the spring semester the participants are expected to perform their degree project (15 higher education credits).

Courses

The programme is course-based. Lists of courses are included in appendix 1.

Grading system

Courses in the first and the second cycle are graded on a scale from A to F. A-E are passing grades, A is the highest grade. The grades pass (P) and fail (F) are used for courses under certain circumstances.

Conditions for participation in the programme

- When the programme starts in late August, the accepted students on the program should register for the next term at the roll call. At the same time, course selection must be done.
- The next study course could be started even if the earlier courses are not passed. The only restriction is the degree project where at least 4 out of 6 study courses must be closed and passed.
- Since the courses can be taken individually, and in any sequence, the registration for each course is obligatory at starting date of the study course in question.

Recognition of previous academic studies

Courses taken after the 3 year basic academic degree could, if they cover the same area or an adjacent, relevant area, be recognised as part of the master’s degree. The student will have to apply for this.

Studies abroad

The master degree has no parts that preferably can be studied at any other university in Sweden or abroad. Since, though, a web-based communication tool is used, some of the work can be performed at any location in the world with access to www.

Degree project

The degree project should be performed to show that the student has grasped the ideas of the master’s degree. This means that the scope of the project should be within the areas of the study courses in the program. Detailed list of possible areas will be presented as part of the documentation at programme start. In order to be eligible to start the degree project, at least 4 of the 6 courses must be completed and passed. The scope of the degree project will then be limited to the passed courses. The choice of the degree project should be done together with the programme administrator. The degree project will be graded in the same way as the courses; A – E. Failure will not exist since the degree report will be returned to the student for complementation until it is passed.
To get the final Master of Science Diploma, all study courses should be completed and passed. The degree project should be passed. The degree title is Master of Science (1 year) in Project Management and Operational Development

Appendix 1 - Course list
Appendix 2 - Programme syllabus descriptions
## Appendix 1: Course list

Master's Programme, Project Management and Operational Development, 60 credits (TPLVM), Programme syllabus for studies starting in autumn 2007

### General courses

#### Year 1

**Mandatory courses (60.0 Credits)**

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HM1M03</td>
<td>Project Planning</td>
<td>7.5 hp</td>
<td>First cycle</td>
</tr>
<tr>
<td>HM1M04</td>
<td>Project Control</td>
<td>7.5 hp</td>
<td>First cycle</td>
</tr>
<tr>
<td>HM1M05</td>
<td>Project Analysis</td>
<td>7.5 hp</td>
<td>First cycle</td>
</tr>
<tr>
<td>HM2003</td>
<td>Leadership for Operational Development</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td>HM2004</td>
<td>Practical Statistics</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td>HM2005</td>
<td>The Organisation and the Management System</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td>HM200X</td>
<td>Degree Project in Project Management and Operational Development, Second Cycle</td>
<td>15.0 hp</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>
Appendix 2: Specialisations

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This programme has no specialisations.